

## **Abstract**

The present invention discloses a method for measuring the operating state of synchronous motor by using composite power angle meter, the method comprising steps of: a) obtaining various signals of the synchronous motor and its system; b) converting the electric signals into digital signals by an internal data collection part of the composite power angle meter, and inputting all the digital signals to a host computer; c) inputting related parameters or commands to the host computer by keyboard and mouse; d) calculating the related data of the motor according to a program by the host computer, obtaining the coordinates of relevant points and related data, and inputting the results to a displaying program; e) processing the coordinates of main points and the calculation results by the displaying program in the host computer, and displaying on a display a dynamic composite power angle graph and the motor-end composite magnetic leakage graph which vary with the motor's parameters. The method provided by the present invention may intuitively reflect the operating state of the synchronous motor from both electric and mechanical aspects, and also reflect the situation of the composite magnetic leakage at the synchronous motor end.